

**ATTACHMENT E**

**BUREAU OF WASTE MANAGEMENT  
INFORMATION**

**Kansas Statutes Annotated 65-3407c.**

(a) The secretary may authorize persons to carry out the following activities without a solid waste permit pursuant to K.S.A. 65-3407c, and amendments thereto:

- (1) Dispose of solid waste at a site where the waste has been accumulated or illegally dumped. Disposal of some or all such waste must be identified as an integral part of a site clean-up and closure plan submitted to the department by the person responsible for the site. No additional waste may be brought to the site following the department's approval of the site clean-up plan.
- (2) Perform temporary projects to remediate soils contaminated by organic constituents capable of being reduced in concentration by biodegradation processes or volatilization, or both. Soil to be treated may be generated on-site or off-site. A project operating plan and a site closure plan must be submitted to the department as part of the project approval process.

(b) The secretary shall consider the following factors when determining eligibility for an exemption to the solid waste permitting requirements under this section:

- (1) Potential impacts to human health and the environment.
- (2) Urgency to perform necessary work compared to typical permitting time frames.
- (3) Costs and impacts of alternative waste handling methods.
- (4) Local land use restrictions.
- (5) Financial resources of responsible party.
- (6) Technical feasibility of proposed project.
- (7) Technical capabilities of person performing proposed work.

(c) The secretary may seek counsel from the local government officials prior to exempting activities from solid waste permitting requirements under this section.



K A N S A S

RODERICK L. BREMBY, SECRETARY

DEPARTMENT OF HEALTH AND ENVIRONMENT

KATHLEEN SEBELIUS, GOVERNOR

Application to Landfarm Petroleum Contaminated Soils  
Without a Permit Authorized by K.S.A. 65-3407c(a)(2)

**SECTION 1. FACILITY INFORMATION** (Site where contaminated soil was generated)

Facility Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Mailing Address (if different than above) \_\_\_\_\_

Contact Name \_\_\_\_\_ Phone \_\_\_\_\_

Legal Location of Soil Source \_\_\_\_\_  
1/4 Section Township Range County

Coordinate Location in degrees decimal: Latitude \_\_\_\_\_, Longitude \_\_\_\_\_

**SECTION 2. APPLICANT INFORMATION** (Owner/Operator, General or Sub-Contractor performing the work)

Individual or Company Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Contact Name \_\_\_\_\_ Phone \_\_\_\_\_

Applicant Type (check all that apply) \_\_\_\_ Soil Generator \_\_\_\_ Consultant \_\_\_\_ Soil Treatment  
Provider

Will you be performing the actual treatment? \_\_\_\_ Yes \_\_\_\_ No, If no who will be providing the actual  
treatment.

Individual or Company Name \_\_\_\_\_

Contact Name \_\_\_\_\_ Phone \_\_\_\_\_

BER Contact \_\_\_\_\_ Project Number \_\_\_\_\_

The property owner of the proposed landfarm location must read and sign page 5 of this application titled *Landfarm Property Owner Consent Form*, if applicable. The signed form must be submitted to the Bureau of Waste Management before any landfarming project will be approved.

Property Owner's Name\_\_\_\_\_

Mailing address \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Legal location of the landfarm site \_\_\_\_\_  
County                      1/4                      Section                      Township                      Range

Coordinate Location in degrees decimal: Latitude \_\_\_\_\_, Longitude \_\_\_\_\_

Current land use of the proposed treatment site (check all that apply)

Agriculture \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial \_\_\_\_\_ Residential \_\_\_\_\_ Other \_\_\_\_\_

Current land use of surrounding area (check all that apply)

Agriculture \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial \_\_\_\_\_ Residential \_\_\_\_\_ Other \_\_\_\_\_

Are there any land use restrictions, zoning requirements, or local permits required? Yes \_\_\_\_\_  
No \_\_\_\_\_

If yes, please describe and attach copies of any documentation. \_\_\_\_\_

Distance and direction to the nearest residence and/or business. \_\_\_\_\_

Are there any water wells located within a 1/2 mile radius of the proposed treatment site? Yes\_\_\_ No\_\_\_

If yes, please indicate their location on the required site location map.

What is the depth to groundwater? \_\_\_\_\_ Direction of groundwater flow (if known) \_\_\_\_\_

**SECTION 4. CONTAMINATED SOIL INFORMATION**

How many cubic yards of contaminated soil do you propose to remediate? \_\_\_\_\_

Type of contaminated soil (sand, silt, clay, silty clay, etc.) \_\_\_\_\_

What type of contaminant is the soil impacted with (check all that apply)

Gasoline \_\_\_\_\_ Diesel Fuel \_\_\_\_\_ Waste/Used Oil \_\_\_\_\_ Solvents \_\_\_\_\_ Other (specify) \_\_\_\_\_

In addition to the above information, contaminated soil must be analyzed by a Kansas certified lab prior to transportation of the soil to the proposed landfarm location. In general all soils contaminated with petroleum products should be analyzed for BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes), 1,2-Dichloroethane and total lead. Soils contaminated with gasoline and or diesel fuel should also be analyzed for TPH by the OA-1 and OA-2 test methods respectively. Other types of contamination such as waste/used oil, crude oil, and solvent contamination may require additional testing. Questions regarding which test are required should be addressed to KDHE Bureau of Waste Management.

**SECTION 5. LANDFARM OPERATING PLAN**

The landfarm operating plan is a separate document you will attach to this application that demonstrate the applicants understanding and ability to manage the landfarming activities. At a minimum all plans should contain the following information. Please note that all landfarms which occur off-site from the contamination site will have target clean up levels of non-detect or a level equal to natural background levels, and will not be based on the KDHE RSK-MANUAL for TPH (GRO) or (DRO). The KDHE Bureau of Waste Management should be contacted prior to determination of background levels. Also, landfarming without a permit will only be authorized for temporary projects, which means all remediation plans should be designed to reduce contamination levels to the target level within two years.

1. **Background:** Describe how the contaminated soil was generated (Spill, Leaking UST, Pipeline break etc...) and explain any current KDHE involvement with the project, giving the names of KDHE representatives already involved.
2. **Site Map:** The site map should show the landfarms orientation and location with respect to nearby residential housing, commercial buildings, waters of the state, and domestic water wells within ½ mile of the site. This map should also be detailed enough that it could be used to locate the landfarm or contain additional directions to the site from the nearest highway. As a general guide landfarms should not be located within: 500 feet of a residence, business, domestic or public water supply; 200 feet from waters of the state and property lines; and 100 feet from a drainage swale, ditch, or other physical feature which channels overland flow.
3. **Site Preparation:** Describe the initial condition and use of the landfarm site and how the landfarm will be constructed; including details about grading, run-off/run-on control measures, and the depth at which contaminated soils will be placed etc.

4. **Treatment and Management Procedures:** The treatment and management procedures should describe how and when the contaminated soils will be remediated. It should also detail the management objectives, method of evaluating those objectives, frequency of evaluation, and the actions to be taken to achieve the stated objectives. Management objectives typically include maintaining the optimum moisture content, pH, nutrient level, and oxygen level to promote microbial growth and subsequent degradation of the contaminant.

For soils impacted with gasoline only, turning the soil to aerate and volatilize the gasoline is a proven acceptable treatment method for attaining the non-detect remedial goal. Typically diesel fuel and other heavier hydrocarbons can not attain the target cleanup level by aeration alone. These landfarms require treatment and management procedures that attempt to optimize and enhance the growing environment of the biodegrading bacteria. In addition to providing oxygen by turning the soil, managing the landfarm to optimize moisture content, pH, and nutrient levels greatly increases the rate and extent of biodegradation, and should be incorporated into most landfarming projects other than those involving gasoline only.

It's important to remember that landfarming without a permit is considered a temporary biodegradation process which employs methods meant to accelerate the natural degradation of the contaminants.

5. **Monitoring Plan:** How will you monitor the progress of the biodegradation process. In general the information you provide should include: frequency of sampling, method of sampling, number of samples, sample locations, parameters to be analyzed for, and analytical methods used.

## SECTION 6. LANDFARM CLOSURE PLAN

The landfarm closure plan is a separate document you will attach to this application. At a minimum it should contain the following information.

1. **Closure Activities:** Detail what will be done to close the site and return it to its original condition, such as regrading, seeding, or removal of the soil. Describe the proposed use of the land/soil once contamination has been reduced to acceptable levels. Explain the over all steps that will be taken to close the site.

Also, as part of the closure activities the KDHE Bureau of Waste Management must be notified at least 10 days prior to confirmation sampling so that a KDHE representative may be present to monitor the sampling and take split samples if so desired.

2. **Confirmation Sampling:** Describe how closure confirmation samples will be taken include: method of sampling, number of samples, sample locations, parameters to be analyzed for, and analytical methods to be used. Confirmation sampling should be representative of the entire landfarm and should, at a minimum, be sampled at a rate of 1 sample per 300 cubic yards of soil. All soil samples to be tested for volatile contaminants should be taken as discrete grab samples. Samples to be tested for semi volatile and non-volatile contaminants may be composite samples.

**Landfarm Property Owner Consent Form**  
(To be developed)

## SECTION 7. CHECK LIST

**Please make sure the following items are complete and attached before submitting this application.**

- 9 Site Map
- 9 Analytical results from a Kansas certified lab
- 9 Landfarm Operating Plan
- 9 Landfarm Closure Plan
- 9 Landfarm Property Owner Consent Form (if applicable)



## Section 5 Landfarm Operating Plan

- 1) **Background:** The \_\_\_\_\_ site has been approved for remedial action and financial assistance through the Petroleum Storage Tank Release Trust Fund. Contaminated soils were discovered on \_\_\_\_\_ (date) during the \_\_\_\_\_ {removal of tanks, monthly inspection, line leak} per District Office Representative \_\_\_\_\_ of the \_\_\_\_\_ District Office.
- 2) **Site Map** of the Landfarm: See attached
- 3) **Site Preparation:** The landfarm property is owned by \_\_\_\_\_ and has been in \_\_\_\_\_ (agricultural, commercial, industrial) use for \_\_\_\_\_ years. The landfarm is surrounded by \_\_\_\_\_ property, with no receptors within 500'. The Vendor/Contractor will create a berm at least 18 inches above ground surface from clean native soils to prevent precipitation run-on and run-off. The Vendor/Contractor will spread the contaminated soils 6 inches above ground surface within the bermed area.
- 4) **Treatment and Management Procedures:** The Vendor/Contractor will conduct three turning events (about one per month, weather permitting) of the contaminated soil in order to accelerate natural aerobic degradation of the petroleum constituents. The Vendor / Contractor will notify the KDHE Project Manager before each turning event. KDHE will field screen the landfarmed soils approximately 25 days after the last turning event.
- 5) **Monitoring Plan:** The landfarm will be visited and berms will be checked by a KDHE representative during or after each turning event. When a field screening event indicates the contaminants of concern have decreased to acceptable levels, confirmation soil lab samples will be collected for analysis by a KDHE representative. The soils will be analyzed for TPH OA-1, TPH OA-2, BTEX, 1,2 DCA, MtBE, Naphthalene, and EDB. This analysis will be compared to lab analysis of soils collected during excavation activities.

## Section 6 Landfarm Closure Plan

- 1) **Closure Activities:** Confirmation soil samples will be collected from the landfarm site as described in the next item. Upon attaining closure approval, the berms surrounding the landfarm will be destroyed. Remediated soils within the bermed area will be used by the contractor as fill dirt for agricultural or commercial use.
- 2) **Confirmation Sampling:** The number of confirmation samples will depend on the quantity of soil that was treated. KDHE is anticipating removal of \_\_\_\_\_ cubic yards of contaminated soil from the project site. A grab sample will be collected per 1000 sq. foot area of treated soil from areas that exhibited levels of contamination, plus additional samples where needed. The soils will be analyzed for TPH OA-1, TPH OA-2, BTEX, 1,2 DCA, MtBE, Naphthalene and EDB.